

## ABSTRACT

An error correction method for optical discs, and more particularly, an error correction method appropriate to high density discs is provided. The error correction method adds inner parity and outer parity to an error correction block of size  $n$  byte  $\times$   $m$   $\times$   $o$ . The method comprises the steps of obtaining a plurality of inner parity blocks (PI blocks) by segmenting the error correction block in the inner parity (PI) direction into  $x$  segments; generating  $e$ -byte PI for each of the plurality of PI blocks generated by segmenting, and adding the  $e$ -bytes to the PI blocks PIs to the PI direction; and generating  $f$ -byte outer parity (PO) in the PO direction of the error correction block, and adding the POs to the PO direction. The error correction method enhances error correction capability while maintaining a redundancy of parity signal on a level similar to conventional DVDs.